

1 ABSTRACT

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3 A vertical cavity surface emitting laser includes a first  
4 mirror region forming a first distributed Bragg reflector, a  
5 first cladding region, an active region, a second cladding  
6 region including a high electrical resistance implanted region  
7 positioned to define a current path, a second mirror region,  
8 and a current spreading region. A first electrical contact is  
9 positioned on the current spreading region and a second  
10 electrical contact is positioned to conduct electrical current  
11 in circuit with the first electrical contact through the  
12 current path. The current spreading region and the second  
13 mirror region cooperate to produce substantially uniform  
14 current distribution in the current path. A third mirror  
15 region is positioned on the current spreading region. The  
16 second and third mirror regions cooperate to provide a  
17 complete distributed Bragg reflector.